

U.S. ENVIRONMENTAL PROTECTION AGENCY  
 POLLUTION/SITUATION REPORT  
 Bautsch-Gray Mine Site - Removal Polrep

US EPA RECORDS CENTER REGION 5



467121



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 Region V**

**Subject:** POLREP #18  
 Progress  
 Bautsch-Gray Mine Site  
 B5TS  
 Jo Daviess County, IL  
 Latitude: 42.3574200 Longitude: -90.3985700

**To:** Richard Karl, US EPA Region 5  
 Doug Ballotti, US EPA Region 5  
 Sam Borries, US EPA Region 5  
 Jason El-Zein, US EPA Region 5  
 Mike Ribordy, US EPA Region 5  
 Pamela Molitor, US EPA Region 5  
 Tom Turner, US EPA Region 5  
 Cheryl Allen, US EPA Region 5  
 Yolanda Bouchee-Cureton, US EPA  
 Sherry Fielding, US EPA  
 HQ EOC, US EPA  
 Michelle Tebrugge, Illinois EPA  
 John Kim, Illinois EPA  
 Mark Johnson, ATSDR  
 Todd Goeks, NOAA  
 Laurie Lee, NOAA  
 Wayne Babcock, US Department of Interior  
 Valencia Darby, US Department of Interior  
 Lindy Nelson, US Department of Interior  
 Robert Burr, US Department of Interior  
 Annette Trowbridge, U.S. Fish & Wildlife  
 Marc Miller, Illinois DNR  
 Todd Rettig, Illinois DNR

**From:** Leonard Zintak, On-Scene Coordinator  
**Date:** 6/20/2014  
**Reporting Period:** 06/16/14-06/20/16

**1. Introduction**

## 1.1 Background

<b>Site Number:</b>	B5TS	<b>Contract Number:</b>	EP-S5-08-04
<b>D.O. Number:</b>	21	<b>Action Memo Date:</b>	5/17/2010
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Time-Critical
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	NPL	<b>Operable Unit:</b>	NA
<b>Mobilization Date:</b>	9/9/2010	<b>Start Date:</b>	9/9/2010
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>	TBD	<b>RCRIS ID:</b>	TBD
<b>ERNS No.:</b>	NA	<b>State Notification:</b>	Yes
<b>FPN#:</b>	NA	<b>Reimbursable Account #:</b>	NA

### 1.1.1 Incident Category

Time-Critical Removal Action

### 1.1.2 Site Description

The approximately 55-acre area of contamination is composed of the remnants of a former lead and zinc mining operation and two residential properties. The main tailings pile area is approximately 45-acres in size and is located on the east side of Blackjack Road. Road ditch areas along Blackjack Road have also been impacted by the contaminated mine tailings as well as residential property. A mine tailings deposition area west of Blackjack Road is also part of the site. The Bautsch-Gray Mine Site is on the National Priorities List (NPL).

#### 1.1.2.1 Location

The Bautsch-Gray Mine Site is about 4 miles south of Galena, in Jo Daviess County, Illinois. The Site is located in a rural agricultural and residential area and is bordered to the north, south, and east by residential properties and agricultural land, and to the west by Blackjack Road and residential areas. The tailings have been migrating onto the two residential properties to the west of Blackjack Road. The geographical coordinates for the Site are Latitude 42.3574200 and Longitude -90.3985700.

#### 1.1.2.2 Description of Threat

The Site is composed of the remnants of a former lead and zinc mining operation dating back to the early 1900's. Elevated levels of lead and arsenic have been detected in soil and tailings on and around the site. Elevated levels of lead have been found in a residential well adjacent to the site. Also elevated lead levels have been found in drainage ditches along Blackjack Road as well as in nearby Smallpox Creek.

### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

During the week of October 6 through 8, 2009, U.S. EPA and the START contractor conducted a site assessment (SA) at the Bautsch Gray Site. In summary, U.S. EPA collected 36 surface soil samples and field screened Site soils with an x-ray fluorescence (XRF) instrument (InnovX). Residential well and surface water samples were also taken. Lead and arsenic results exceeding the action levels and cleanup levels were found around the mine tailings pile, in and around the road ditches along Blackjack Rd. and on adjacent residential areas.

## 2. Current Activities

### 2.1 Operations Section

#### 2.1.1 Narrative

U.S. EPA, the ERRS contractor and the START contractor mobilized to the site on June 16, 2014, to begin the Summer 2014 removal activities. During this reporting period, the following tasks were accomplished:

- While Pond 2 was dry early in the week, excavation of accumulated tailings from the bottom of the pond and around the standpipes was completed.
- Additional large rip-rap was added to drainage channel between Pond 1 and Pond 2, making it wider near Pond 1.
- Roads throughout the main tailings pile area were re-graded following erosion and washouts that occurred over the past year.
- Topsoil was collected from a borrow area north of the tailings pile and was used to cover/reinforce the area surrounding Pond 1 prior to seeding/mulching.
- Debris fencing was installed in Pond 2 to capture leaves, sticks and other debris before it enters the lower part of the pond near the two standpipes.
- Landscape restoration and seeding will be completed on the area surrounding Pond 1.
- Fertilizer (13-13-13) will be added to the newly seeded portions surrounding Pond 1.
- Mowing was completed on the berm along Blackjack Road, the Pond 2 berm, The Pond 5 berm, as well as the area to the south of Pond 1.
- Additional warning signs were posted, and existing signs were repaired, along Blackjack Road and near Pond 1.

#### 2.1.2 Response Actions to Date

Initial removal action activities occurred from September 2010 to November 2010. The following cleanup and stormwater management activities were conducted: removal of lead-contaminated soil at the 746 S Blackjack residential property; construction of an upgradient storm water diversion ditch; and the initial construction of retention/sedimentation ponds 2, 3, 4, and 5.

Additional removal activities occurred from July 2011 to September 2011 and included the following activities: construction of retention pond 1, improvement of the drainage ditch along Blackjack Road, construction of Ponds 2 and 5, reconfiguration of the berm along Blackjack Road, and the cleanup and landscape restoration at the 746 residential property. A major flash flood occurred at the site on July 27-28, 2011. Over 13 inches of rain fell over a 12 hour time period at the site. Damage that occurred as a result of the major storm was repaired. As a result of the historic 500+ year rainfall resulting from the July 27-28, 2011 storm, the storm water model for the site has been re-run

based on the current site configuration. The final design will continue to meet the 100-year storm criteria.

Further removal activities occurred in September 2012 and included the following activities: revegetating the 798 property (Horseshoe Area) by spreading/tilling of biosolids into the tailings as well as seeding/mulching of the areas; construction of a gravel path between the 798 property's residential area and the borrow area to the west; transport of top soil to cover and reinforce the berms at Pond 2 and Pond 5 prior to seeding/mulching; and the addition of large rip-rap to reinforce upgradient stormwater diversion ditch as well as channel between Pond 1 and Pond 2.

### **2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)**

The PRPs for the site have installed a reverse osmosis (RO) drinking water filtration system at the home at 746 S. Blackjack Rd. under an Administrative Order by Consent (AOC). Filter installation on the private well was performed in July 2010, and operation and maintenance by the PRPs will continue for two years until July 2012. Sampling for lead, arsenic, and copper has indicated levels below the drinking water standards (MCLs). The pH levels of the water appear to be lower than normal (pH 5.2) due to the RO system. It is anticipated that the PRPs will be working with the home owners to resolve the low pH issue.

### **2.1.4 Progress Metrics**

Further removal activities are scheduled to be conducted between in August/September 2014. This work will complete this current removal action. It is anticipated that a new removal action to address future site control and maintenance will be initiated in 2015.

## **2.2 Planning Section**

### **2.2.1 Anticipated Activities**

The following removal activities are anticipated for the Site:

- In August/September 2014 the grass on the Blackjack Rd berm, the Pond 2 berm, and the Pond 5 berm will be mowed. Mowing is planned for spring and late summer each year.
- Beginning in 2015, stand pipes in Ponds 1, 2, 5, & 6 will be maintained and cleared of debris. In future years tailing will need to be removed from the bottom of the ponds and around the standpipes.
- Areas of tailings erosion will likely require repair especially where grass has not been established.
- Warning signs along the Blackjack Rd berm will be maintained.
- Site inspections will be conducted of the main tailings pile, the Horseshoe Area, and surrounding areas as needed.

#### **2.2.1.1 Planned Response Activities**

See section 2.2.1 above.

#### **2.2.1.2 Next Steps**

It is anticipated that a new removal action to address future site control and

maintenance will be initiated in 2015. Routine site inspections will continue at least every six months and after severe rainfall events.

### 2.2.2 Issues

The Bautsch Gray Mine Site has been placed on the National Priorities List (NPL). The Remedial Investigation (RI) has been initiated.

It is anticipated that in the next several years the Site will be monitored and maintained by the Removal Program, as necessary, until the Remedial Action (RA) is initiated.

## 2.3 Logistics Section

Not applicable.

## 2.4 Finance Section

### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$2,655,000.00	\$2,640,513.00	\$14,487.00	0.55%
START - Weston	\$407,500.00	\$405,187.00	\$2,313.00	0.57%
START - Tetra Tech	\$10,000.00	\$7,850.00	\$2,150.00	21.50%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	<b>\$3,072,500.00</b>	<b>\$3,053,550.00</b>	<b>\$18,950.00</b>	<b>0.62%</b>

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

## 2.5 Other Command Staff

### 2.5.1 Safety Officer

Site safety for the project has been good.

During earth moving activities this week, air monitoring was conducted using a Thermo Scientific ADR-1500, which monitors for PM10 particulate. The ATSDR action level of 70 µg/m<sup>3</sup> will be used to determine if levels of PM10 in the air are acceptable. No elevated readings have been observed throughout this reporting period.

**2.5.2 Liaison Officer**

Not applicable.

**2.5.3 Information Officer**

The OSC will be speaking at the Jo Daviess County Executive Committee meeting scheduled for Monday, June 30, 2014.

A fact sheet regarding Additional Cleanup Activities Planned at Contaminated Site can be found in the "documents" section of this site or at:

<http://www.epaosc.org/sites/6173/files/Final%20Fall%202012%20Bautsch-Gray%20Mine%20Fact%20Sheet.pdf>

**3. Participating Entities****3.1 Unified Command**

Not applicable.

**3.2 Cooperating Agencies**

Illinois Environmental Protection Agency (IEPA)

Jo Daviess County

Agency for Toxic Substances and Disease Registry (ATSDR)

**4. Personnel On Site**

1 EPA OSCs

1 ERRS Response Manager

1 ERRS Field Cost Accountant

4 Equipment Operators/On-site Truck drivers

1 Laborer

1 Site Security (after hours)

1 START (Tetra Tech)

**5. Definition of Terms**

ERRS – Emergency and Rapid Response Services

FOH – Federal Occupational Health

ILEPA – Illinois Environmental Protection Agency

NPL – National Priorities List (U.S. EPA)

OSC – On-Scene Coordinator

RCRA – Resource Conservation and Recovery Act

START – Superfund Technical Assessment and Response Team

RI – Remedial Investigation

RA – Remedial Action

U.S. EPA – United States Environmental Protection Agency

**6. Additional sources of information****6.1 Internet location of additional information/report**

For additional information, please refer to [www.epaosc.org/.bautschgraymine](http://www.epaosc.org/.bautschgraymine).

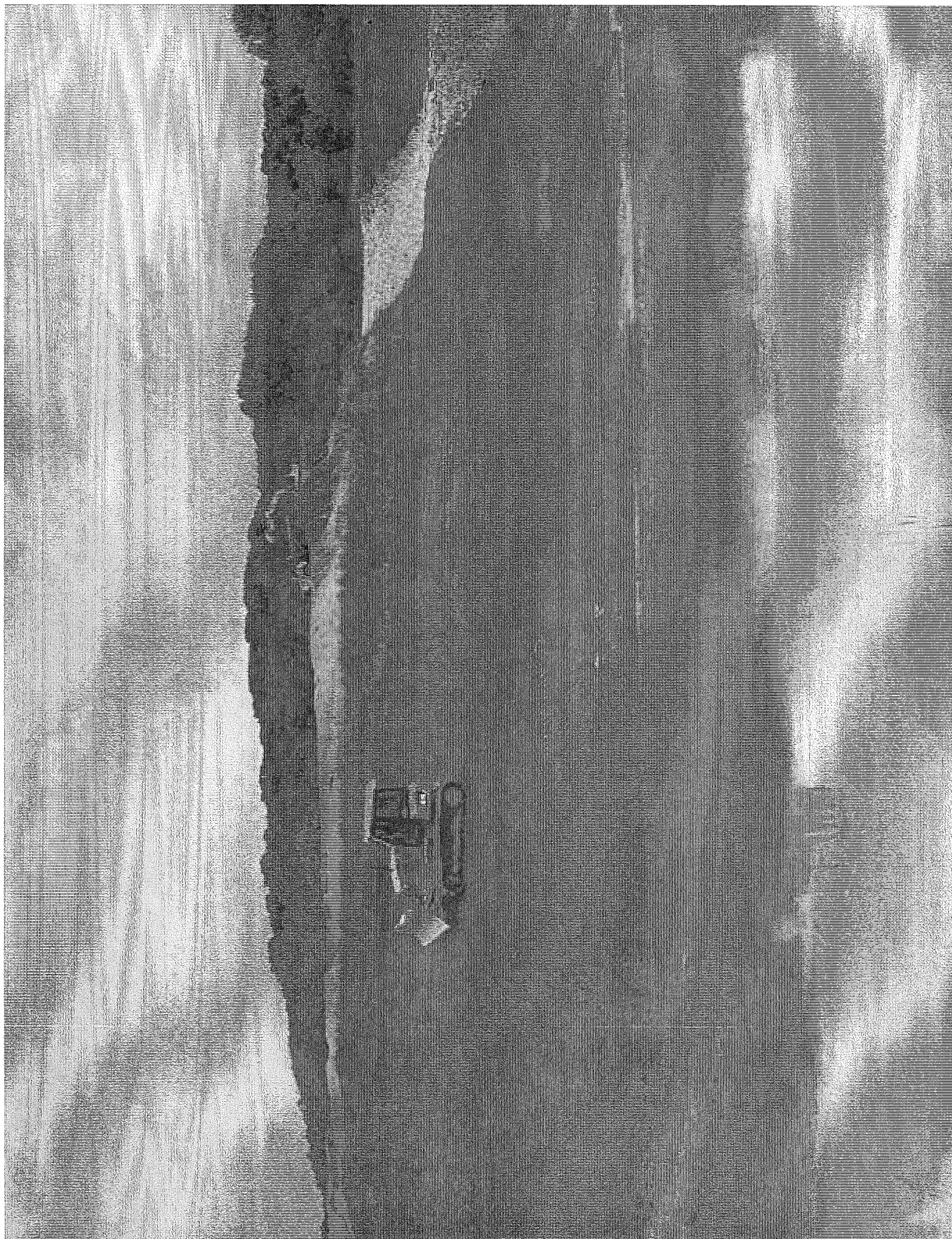
**6.2 Reporting Schedule**

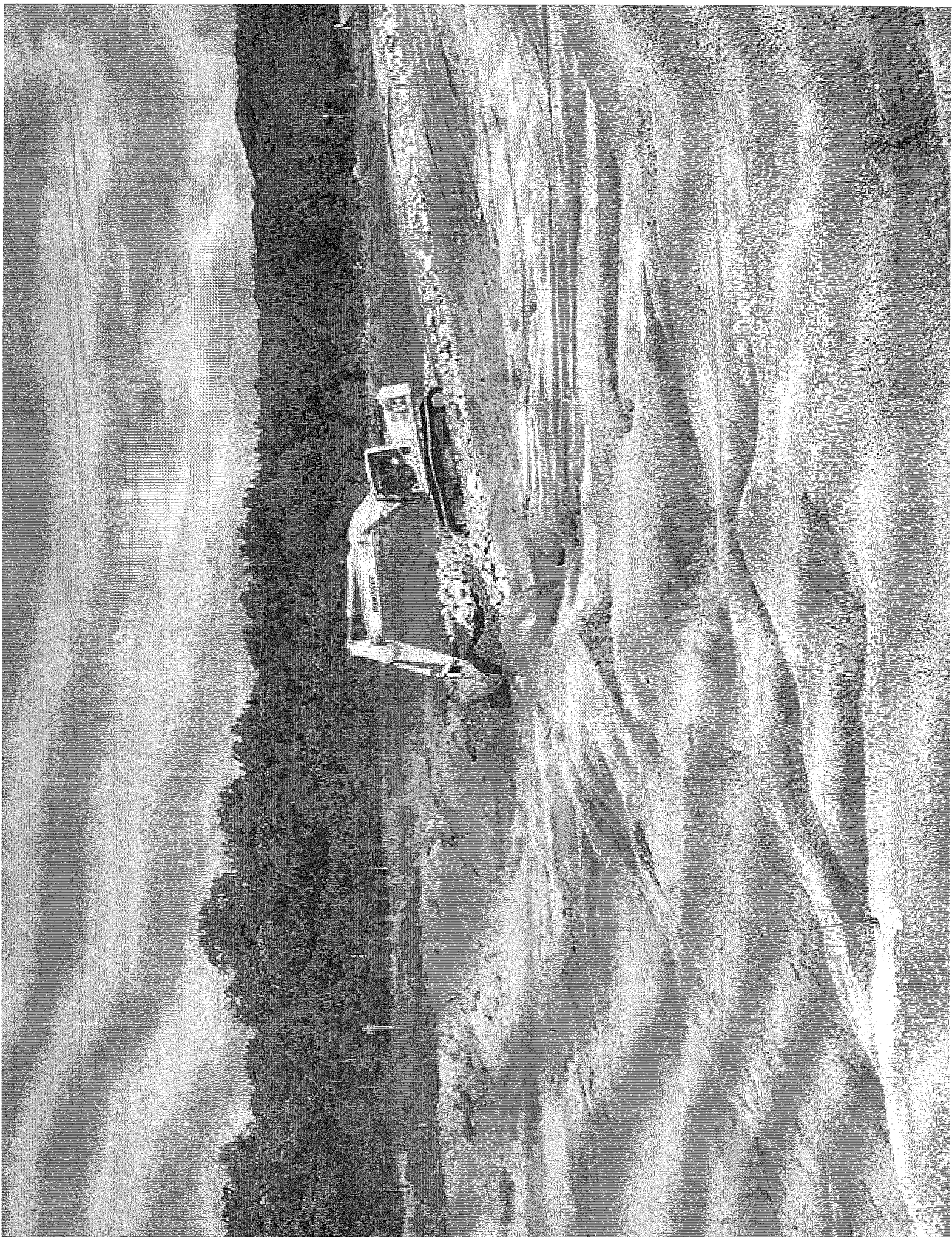
The next POLREP will be submitted in September 2014.

**7. Situational Reference Materials**

For additional information, please refer to [www.epaosc.org/bautschgraymine](http://www.epaosc.org/bautschgraymine)







US EPA R5  
FY 2014 OIL: HQ, R5, Civil Enforcement as of 6/24/2014

Row No.	Budget Name (Source: Budget Advanced Spending & Budget Status Inquiry)	Budgeted Amount	Outstanding Commitment	%	Unliquid'd Obligation (or not yet paid)	%	Accrual	%	Expended Amount	%	Total Used or Spending	%	Available Amount or Balance Amount	%	Total Accrual on Purchase Requisition	Available Amount minus Accrual	% Remaining =1.0-(((Total Used + Accrual) / Budget)
2	HR - Oil Spill Resp - Reimb (HQ)	6,100,000	0	0%	2666616	44%	0		2180284	36%	4846900	79%	1,253,100	21%			
3	Salaries -10 303D91 (HQ)	0	0		0	#####	0	#####	360515	#####	360515	#####	-360,515	#DIV/0!			
4	Travel Subject to Ceiling - 21 (HQ)	0	0		13007	#####	0	#####	46773	#####	59780	#####	-59,780	#DIV/0!			
5	Site Specific Travel - 28 (HQ)	0	0		0	#####	0	#####	0	#####	0	#####	0	#DIV/0!			
6	Expense -36 (HQ)	0	0		0	#####	0	#####	0	#####	0	#####	0	#DIV/0!			
7	Contracts - 37 (303D91) (HQ)	6,100,000	0		2653609	44%	0	0%	1772996	29%	4426605	73%	1,673,395	27%			
8	WCF - 38 (HQ)	0	0		0	#####	0	#####	0	#####	0	#####	0	#DIV/0!			
9	SEE - 41 (HQ)	0	0		0	#####	0	#####	0	#####	0	#####	0	#DIV/0!			
10	Program 303D91 Oil (HQ), HR	6,100,000	0	0%	2666616	44%	0	0%	2180284	36%	4846900	79%	1,253,100	21%		0	1253100 21%
11																	
12	H - Oil Spill Response (R5)																
13	Salaries -10 (303D91) Includes transportation subsidy	960,000	0	0%	0	0%	0	0%	624433	65%	624433	65%	335,567	35%			
14	Travel Subject to Ceiling - 21 (303D91)	49,000	0	0%	9986	20%	0	0%	17410	36%	27396	56%	21,604	44%			
15	Site Specific Travel - 28 (303D91)	0	0	#DIV/0!	0	#####	0	#####	0	#####	0	#####	0	#DIV/0!			
16	Expense -36 (303D91)	0	0	#DIV/0!	0	#####	0	#####	0	#####	0	#####	0	#DIV/0!			
17	Contracts - 37 (303D91)	155,000	0	0%	10000	6%	0	0%	0	0%	10000	6%	145,000	94%			
18	WCF - 38 (303D91)	29,000	0	0%	0	0%	0	0%	0	0%	0	0%	29,000	100%			
19	SEE - 41 (303D91)	0	0	#DIV/0!	0	#####	0	#####	0	#####	0	#####	0	#DIV/0!			
20	Program 303D91 Oil (R5), H	1,193,000	0	0%	19986	2%	0	0%	641843	54%	661829	55%	531,171	45%		531171	45%
21																	
22	Salaries -10 (501E44 - Civil Enf.)	0	0	#DIV/0!	0	#####	0	#####	67615	#####	67615	#####	-67,615	#DIV/0!			
23	Travel Subject to Ceiling - 21 (501E44 - Civil Enforcement)	0	0	#DIV/0!	0	#####	0	#####	842	#####	842	#####	-842	#DIV/0!			
24	WCF - 38 (501E44 - Civil Enf.)	0	0	#DIV/0!	0	#####	0	#####	0	#####	0	#####	0	#DIV/0!			
25	ZZZGF2 - 10 only (Facilities Infra & Ops.)	865,000	0	0%	0	0%	0	0%	0	0%	0	0%	865,000	100%			
26	Program 501E44 Civil Enf (R5), H	865,000	0	0%	0	0%	0	0%	68457	8%	68457	8%	796,543	92%		796543	92%
27		2,058,000	0	0%	19986	1%	0	0%	710300	35%	730286	35%	1,327,714	65%			